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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/061,786	02/04/2002	Morgan D. Murphy	DP-304694	2218
22851	7590	07/30/2004	EXAMINER	
DELPHI TECHNOLOGIES, INC.			BROADHEAD, BRIAN J	
M/C 480-410-202			ART UNIT	
PO BOX 5052			PAPER NUMBER	
TROY, MI 48007			3661	

DATE MAILED: 07/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/061,786

Applicant(s)

MURPHY ET AL.

Examiner

Brian J. Broadhead

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-6 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norton, 6364352.
3. As per claim 1, Norton discloses comparing a filtered version of said output signal to a threshold having a default value corresponding to a predetermined occupant weight under a given set of conditions, determining a value of a parameter that affects the magnitude of said output signal, adjusting the threshold above or below the default value when the determined value is outside a predetermined range of values, allowing deployment of said restraint when the filtered version of said output signal is above the threshold, and suppressing deployment of said restraint when the filtered version of said output signal is below the threshold on lines 8-24, on column 15, lines 4-16, on column 16, and lines 1-20, on column 17; measuring a vertical acceleration of the vehicle, determining a value of the free mass based on a variation of the signal with respect to a variation of the measure vertical acceleration on lines 2-16, on column 16; establishing a predetermined range of free mass values corresponding to average weight occupant on columns 17-21; and maintaining a current value of the threshold when the determined value of the free mass is within the predetermined range of free mass

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values on columns 17-21. On columns 17-21 Norton lists several ranges and on column 17, lines 55-61, it is disclosed that these ranges are usable with different deployment criteria. Norton does not disclose adjusting the threshold below said default value when the determined value of the free mass is above a predetermined range of free mass values corresponding to an average weight occupant, and adjusting the threshold value above the default value when the determined value is below the predetermined range of the free mass value. Norton does disclose adjusting up the value(measured weight) compared to the default threshold value when the determined value of the free mass is above a predetermined range of free mass values corresponding to an average weight occupant, and adjusting down up the value compared to the default threshold value when the determined value of the free mass is below the predetermined range of the free mass value on lines 10-65, on column 21. These two different ways of doing the same thing are equivalents. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the thresholds in Norton instead of adjusting the value compared to the threshold because it is a design choice and they both accomplish the same exact things.

4. As per claim 5, Norton discloses measuring the tension of the seat belt and adjusting the threshold above the default value when the measures tension is above a predetermined normal range on lines 1-10, on column 7.

5. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norton, 6364352, in view of Wallace, US 2003/0040858.

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6. Norton discloses the limitations as set forth above. Norton does not disclose measuring a vehicle run time and delaying the step of determining the value of the free mass until the measured run time reaches a predetermined threshold; measuring the temperature and adjusting the threshold below the default value when the measured temperature is below a predetermined normal range. Wallace teaches measuring a vehicle run time and delaying the step of determining the value of the free mass until the measured run time reaches a predetermined threshold in paragraphs 250-252; and measuring the temperature and adjusting the threshold below the default value when the measured temperature is below a predetermined normal range in paragraphs 99, 143, and 250. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the delay time and temperature measurement of Wallace in the invention of Norton because such modification would prevent faulty measurements of occupants that are still getting comfortable and environmental changes as stated in Wallace.

***Allowable Subject Matter***

7. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not disclose determining the value of free mass according to a ratio of the first variance and the second variance.

***Response to Arguments***

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1. Applicant's arguments filed 5-24-04 have been fully considered but they are not persuasive. The addition of the range of average weight occupants and maintaining the current threshold when the free mass is in that range does not overcome the cited prior art. Norton discloses the use of ranges.

***Conclusion***

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Broadhead whose telephone number is 703-308-9033. The examiner can normally be reached on Monday through Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

BJB

  
THOMAS G. BLACK  
SUPERVISORY PATENT EXAMINER  
GROUP 2400